

WE CLAIM:

1 1. An isolated and purified nucleic acid having the sequence of residues 331-
2 455 of SEQ ID NO: 2.

1 2. A vector comprising the nucleic acid of claim 1.

1 3. A cell comprising the vector of claim 2.

1 4. A method for identifying an individual at risk for or suffering from
2 rheumatoid arthritis, which method comprises:

3 (i) providing a cell which expresses a CD40 ligand; and
4 (ii) sequencing at least one segment of the promoter sequence of the
5 sequence encoding the CD40 ligand, wherein said segment comprises position -125 of
6 the promoter sequence;

7 wherein said individual is at risk for or has rheumatoid arthritis if the
8 nucleotide at position -125 is C.

1 5. A method for identifying an individual at risk for or suffering from
2 rheumatoid arthritis, which method comprises:

3 (i) providing a cell which cell expresses a CD40 ligand;
4 (ii) measuring the level of transcriptional activity of the sequence
5 encoding the CD40 ligand; and

6 (iii) comparing the level of transcriptional activity to a control value;
7 wherein said individual is at risk for or has rheumatoid arthritis if the level
8 of transcriptional activity is substantially different from the control value.

1 6. The method according to claim 5, wherein the level of CD40 ligand
2 transcriptional activity is substantially different due to an A to C nucleotide substitution
in the promoter sequence at position -125.

1 7. The method according to claim 5, wherein the level of CD40 ligand or
2 CD40 ligand mRNA is measured.

1 8. A method for identifying a compound that is useful in treating rheumatoid
2 arthritis, which method comprises:

3 (i) contacting a CD40 ligand promoter sequence which comprises the
4 sequence of residues 331-455 of **SEQ ID NO: 2**, or a functional fragment thereof, with
5 the compound;

6 (ii) measuring CD40 ligand transcriptional activity; and

7 (iii) comparing the measured CD40 ligand transcriptional activity to
8 a control value;

9 wherein the compound is useful for treating rheumatoid arthritis if the
10 transcriptional activity is substantially different from the control value.

1 9. A method for identifying a compound that is useful in treating rheumatoid
2 arthritis, which method comprises:

3 (i) contacting a reconstituted system for measuring CD40 ligand
4 transcriptional activity, comprising a CD40 ligand promoter sequence comprising the
5 sequence of residues 331-455 of **SEQ ID NO: 2**, or a functional fragment thereof, with
6 a test compound;

7 (ii) measuring the CD40 ligand transcriptional activity; and

8 (iii) comparing the CD40 ligand transcriptional activity to the CD40
9 ligand transcriptional activity in the absence of the compound;

10 wherein the compound is useful for treating rheumatoid arthritis if the CD40
11 ligand transcriptional activity in the presence of the compound is substantially different
12 from the CD40 transcriptional activity in the absence of the compound.